

// This sheet compiles data from "Site Info," "Performance Standards," and "Monitoring Plan" into one comprehensive data set, expanded by wetland type.																
PROJECT INFORMATION							TYPE OF WETLAND MITIGATION									
Project Name	State	USACE District	Bank Type	Sponsor	Status	Approval Date	HGM	Cowardin	Modifier	Hydrologic Regime	Creation	Restoration	Enhancement	Preservation	HPS	Specific HPS
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010			Deep Marsh	Permanently inundated	Yes	No	No	No	Yes	Permanently inundated; 12-28 in target; should stay b/w 4-36 in at all times
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010		Open Water	Pond	Permanently inundated	Yes	No	No	No	Yes	Permanently inundated; 48-72 in target for deepest portions
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010		Forested	Cottonwood	Seasonally deeply saturated	Yes	No	No	No	Yes	Seasonally deeply saturated; 12-48 in below surface for min 14 consec days during growing season for 5/10 yrs
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010			Wet Meadow	Seasonally saturated	Yes	No	No	No	Yes	Seasonally saturated; min 14 consec days of ponding or water table max 12 in during growing season for min 5/10 yrs
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010		Scrub/Shrub	Willow-Alder	Seasonally saturated	Yes	No	No	No	Yes	Seasonally saturated; min 14 consec days of ponding or water table max 12 in during growing season for min 5/10 yrs
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010			Marsh	Semi-permanently inundated	Yes	No	No	No	Yes	Semi-permanently inundated; 0-14 in for min 50% of growing season in normal years hydrology must meet
El Paso County UMBRELLA - Falcon Vista	CO	Albuquerque	Single-Client	El Paso County Environmental Services Dept.	Approved	4/30/2013		Emergent	Persistent		No	Yes	Yes	Yes	Yes	duration of saturation/inundation in COE quantitative definition by wetland type; 70% of dominant species must be FAC or wetter
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008		Forested			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008		Grass/Grasslike			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008		Scrub/Shrub			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008	Slope				Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate

HYDROLOGIC PERFORMANCE STANDARDS										MONITORING REQUIREMENTS							NOTES
Reference Area	Outcome-Based	Quantitative	Saturation	Water Table	Inundation	Water Criteria	Time Criteria	Weather	Format	Data	Quantitative	Subsurface Readings	By Season	Collection Frequency	Monitoring Period	Functional Assessment	Notes
Yes	Yes	Yes	No	No	Yes	Range	No	No	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
Yes	Yes	Yes	No	No	Yes	Range	No	No	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
Yes	Yes	Yes	Yes	Yes	No	Range	Min/Max, Prob	No	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
Yes	Yes	Yes	Yes	Yes	No	Min/Max	Min/Max, Prob	No	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
Yes	Yes	Yes	Yes	Yes	No	Min/Max	Min/Max, Prob	No	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
Yes	Yes	Yes	No	No	Yes	Range	Prob	Yes	Tables	Staff gauge - depth of inundation	Yes	No	Yes	/2 wks growing, /2 months otherwise	Until final PS have been achieved for 2 consec yrs		
No	Yes	Yes	No	No	Yes	Range	No	No	List, paragraphs	List of primary/ secondary hydrology indicators, hydrophytic veg cover	No	No	Yes	Annually	5 yrs AND 3 yrs of no supplemental watering after PS met		
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 yrs		
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 yrs		
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 yrs		
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 yrs		

Four Mile Creek	CO	Omaha	Single-Client	Denver Water	Approved	8/27/2007			Fen		No	Yes	Yes	No	Yes	Saturated within 12 in for >= 66% of growing season, and/or avg seasonal table depth within 14.5 in
Four Mile Creek	CO	Omaha	Single-Client	Denver Water	Approved	8/27/2007	Mineral Flats				No	Yes	Yes	No	Yes	Saturated within 12 in for >=47% of growing season (edge areas may be saturated for 12.5% of growing season), and/or avg seasonal table depth within 20 in
Limon	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996		Emergent	Persistent		Yes	No	No	No	Yes	75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter
Limon	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996		Emergent	Non-Persistent		Yes	No	No	No	Yes	75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter
Limon	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996		Broadleaf Deciduous	Willow		Yes	No	No	No	Yes	75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter
Limon	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996		Aquatic Bed	Rooted Vascular		Yes	No	No	No	Yes	75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter
Marshall	CO	Omaha	Public Commercial	City of Boulder	Sold-Out	4/19/2000		Scrub/Shrub							Yes	1987
Marshall	CO	Omaha	Public Commercial	City of Boulder	Sold-Out	4/19/2000		Emergent							Yes	1987
Marshall	CO	Omaha	Public Commercial	City of Boulder	Sold-Out	4/19/2000		Aquatic Bed							Yes	1987
Mesa County Wetland UMBRELLA	CO	Sacramento	Public Commercial	Mesa County Dept. of Public Works	Approved	6/1/2005			Wet Meadow		Yes	Yes	Yes	No	Yes	Site plan specifies that wetland hydrology should be exhibited 30 days after recontouring
Mesa County Wetland UMBRELLA	CO	Sacramento	Public Commercial	Mesa County Dept. of Public Works	Approved	6/1/2005		Emergent			Yes	Yes	Yes	No	Yes	Site plan specifies that wetland hydrology should be exhibited 30 days after recontouring
Middle South Platte River	CO	Omaha	Private Commercial	Land and Water Resources, Inc.	Approved	5/20/1999		Emergent		Seasonally flooded	Yes	No	No	No	Yes	1987
Middle South Platte River	CO	Omaha	Private Commercial	Land and Water Resources, Inc.	Approved	5/20/1999		Emergent		Semi- permanently flooded	Yes	No	No	No	Yes	1987

Yes	Yes	Yes	Yes	Yes	No	Min/Max	Prob	No	Paragraphs	Duration of soil saturation (12 in), depth to table	Yes	Yes	Yes	July-September	5 yrs or at discretion of IRT		HPS Format: one p specifies HPS for wetland type, one p explains how HPS were derived from ref
Yes	Yes	Yes	Yes	Yes	No	Min/Max	Prob	No	Paragraph	Duration of soil saturation (12 in), depth to table	Yes	Yes	Yes	July-September	5 yrs or at discretion of IRT		HPS Format: one p specifies HPS for wetland type, one p explains how HPS were derived from ref
No	Yes	Yes	No	No	No	No	No	No	List	Acreage, wetland classes, vegetative monitoring	No	No	Yes	Fall	5 yrs or at discretion of IRT	HEP, HGM	Functional assessments used in mitigation ratios
No	Yes	Yes	No	No	No	No	No	No	List	Acreage, wetland classes, vegetative monitoring	No	No	Yes	Fall	5 yrs or at discretion of IRT	HEP, HGM	Functional assessments used in mitigation ratios
No	Yes	Yes	No	No	No	No	No	No	List	Acreage, wetland classes, vegetative monitoring	No	No	Yes	Fall	5 yrs or at discretion of IRT	HEP, HGM	Functional assessments used in mitigation ratios
No	Yes	Yes	No	No	No	No	No	No	List	Acreage, wetland classes, vegetative monitoring	No	No	Yes	Fall	5 yrs or at discretion of IRT	HEP, HGM	Functional assessments used in mitigation ratios
No	No	No	No	No	No	No	No	No	List	Saturation soil horizon via shallow monitoring wells	Yes	Yes	No	Unspecified	Until sold-out		
No	No	No	No	No	No	No	No	No	List	Saturation soil horizon via shallow monitoring wells	Yes	Yes	No	Unspecified	Until sold-out		
No	No	No	No	No	No	No	No	No	List	Saturation soil horizon via shallow monitoring wells	Yes	Yes	No	Unspecified	Until sold-out		
No	No	No	No	No	No	No	Min/Max	No	List	Piezometers - depth to GW, depth to saturation, depth of inundation (gauges)	Yes	Yes	Yes	At least annually	5 yrs+		
No	No	No	No	No	No	No	Min/Max	No	List	Piezometers - depth to GW, depth to saturation, depth of inundation (gauges)	Yes	Yes	Yes	At least annually	5 yrs+		
No	No	No	No	No	No	No	No	No	List	Depth to GW - shallow wells	Yes	Yes	Yes	2/month, plus constant electronic readings, for 5 months/yr	Until PS have been achieved		Written report of field tile locations submitted to COE; monitoring reports contain hydrographs
No	No	No	No	No	No	No	No	No	List	Depth to GW - shallow wells	Yes	Yes	Yes	2/month, plus constant electronic readings, for 5 months/yr	Until PS have been achieved		Written report of field tile locations submitted to COE; monitoring reports contain hydrographs

Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999			Marsh		Yes	No	Yes	No	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor.
Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999		Emergent	Persistent		Yes	No	Yes	No	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor.
Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999		Aquatic Bed	Rooted Vascular		Yes	No	Yes	No	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor.
Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999			Wet Meadow		Yes	No	Yes	No	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor.
Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999		Scrub/Shrub	Willow Carr		Yes	No	Yes	No	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor.
Riverdale	CO	Omaha	Private Commercial	South Platte Wetlands LLC	Approved	2/1/2002			Wet Meadow		Yes	No	Yes	No	Yes	Saturation within 18 in
Riverdale	CO	Omaha	Private Commercial	South Platte Wetlands LLC	Approved	2/1/2002		Emergent			Yes	No	Yes	No	Yes	Saturation within 3 in
Rocky Mountain Institute	CO	Sacramento	Private Commercial	Rocky Mountain Institute	Suspended	6/2/2005			Grass/Grasslike		No	Yes	No	No	Yes	1987
Rocky Mountain Institute	CO	Sacramento	Private Commercial	Rocky Mountain Institute	Suspended	6/3/2005		Scrub/Shrub	Willow Carr		No	Yes	No	No	Yes	1987
Rocky Mountain Institute	CO	Sacramento	Private Commercial	Rocky Mountain Institute	Suspended	6/1/2005		Forested			No	Yes	No	No	Yes	1987
Spring Water Ranch	CO	Sacramento	Private Commercial	Spring Water Ranch, LLC	Suspended	3/31/2005		Forested			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate

No	No	No	No	No	No	No	No	No	List	Piezometers	Yes	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
No	No	No	No	No	No	No	No	No	List	Piezometers	Yes	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
No	No	No	No	No	No	No	No	No	List	Piezometers	Yes	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
No	No	No	No	No	No	No	No	No	List	Piezometers	Yes	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons		Hydrologic regimes for more specific wetland type specified in phasing plan
No	No	No	No	No	No	No	No	No	List	Piezometers	Yes	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
No	Yes	Yes	Yes	No	No	Min/Max	No	No	Paragraphs	Piezometers	Yes	Yes	Yes	Annually	4 growing seasons		Hydrologic regimes for more specific wetland type specified in phasing plan
No	Yes	Yes	Yes	No	No	Min/Max	No	No	Paragraphs	Piezometers	Yes	Yes	Yes	Annually	4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
No	No	No	No	No	No	No	No	No	List	Hydroperiod, extent/ duration of inundation, GW monitoring, precip	Yes	Yes	Yes	First three growing seasons, then year-to-year basis in perpetuity	5 yrs annually, then every 3 yrs in perpetuity		Site plan specifies that if veg is wrong, water levels will be manipulated
No	No	No	No	No	No	No	No	No	List	Hydroperiod, extent/ duration of inundation, GW monitoring, precip	Yes	Yes	Yes	First three growing seasons, then year-to-year basis in perpetuity	5 yrs annually, then every 3 yrs in perpetuity		Site plan specifies that if veg is wrong, water levels will be manipulated
No	No	No	No	No	No	No	No	No	List	Hydroperiod, extent/ duration of inundation, GW monitoring, precip	Yes	Yes	Yes	First three growing seasons, then year-to-year basis in perpetuity	5 yrs annually, then every 3 yrs in perpetuity		Site plan specifies that if veg is wrong, water levels will be manipulated
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 growing seasons		

Spring Water Ranch	CO	Sacramento	Private Commercial	Spring Water Ranch, LLC	Suspended	3/31/2005		Grass/Grasslike			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate
Spring Water Ranch	CO	Sacramento	Private Commercial	Spring Water Ranch, LLC	Suspended	3/31/2005		Scrub/Shrub			Yes	Yes	No	No	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate
WetBank Gunnison	CO	Sacramento	Private Commercial	Stillwater Preservation LLC	Approved	8/2/1999			Grass/Grasslike		No	Yes	No	No	Yes	1987
WetBank Gunnison	CO	Sacramento	Private Commercial	Stillwater Preservation LLC	Approved	8/2/1999		Forested			No	Yes	No	No	Yes	1987
WetBank Gunnison	CO	Sacramento	Private Commercial	Stillwater Preservation LLC	Approved	8/2/1999		Scrub/Shrub			No	Yes	No	No	Yes	1987
Lower/Middle Yellowstone UMBRELLA - Ringling	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine	Emergent			No	Yes	No	No	Yes	1987
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine	Forested			No	Yes	No	No	Yes	1987
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine	Rock Bottom			No	Yes	No	No	Yes	1987
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine	Scrub/Shrub			No	Yes	No	No	Yes	1987
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine	Unconsolidated Shore			No	Yes	No	No	Yes	1987
MARS Emond Ranch ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	3/31/2017			Prairie Pothole		No	Yes	No	No	Yes	Hydrology within 12 in during growing season (6/23-8/28)
MARS Yellowstone ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	5/2/2017		Emergent			No	No	No	Yes	No	0
MARS Yellowstone ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	5/2/2017		Forested			No	No	No	Yes	No	0
MARS Yellowstone ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	5/2/2017		Scrub/Shrub			No	No	No	Yes	No	0
Middle Missouri River	MT	Omaha	Private Commercial	Middle Missouri Mitigation LLC	Approved	2/24/2012	Depressional	Emergent			No	No	Yes	No	Yes	1987
Middle Missouri River	MT	Omaha	Private Commercial	Middle Missouri Mitigation LLC	Approved	2/24/2012	Slope	Emergent			No	No	Yes	No	Yes	1987
Middle Missouri River	MT	Omaha	Private Commercial	Middle Missouri Mitigation LLC	Approved	2/24/2012	Riverine	Unconsolidated Bottom			No	No	Yes	No	Yes	1987

No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 growing seasons		
No	Yes	Yes	Yes	No	No	Range	No	No	List	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	Yes	/2 wks growing	5 growing seasons		
No	No	No	No	No	No	No	No	No	List	"Hydroperiod duration/ mag"; WRAP	No	No	No	Annually	5 yrs	WRAP, HGM, Ecodata	
No	No	No	No	No	No	No	No	No	List	"Hydroperiod duration/ mag"; WRAP	No	No	No	Annually	5 yrs	WRAP, HGM, Ecodata	
No	No	No	No	No	No	No	No	No	List	"Hydroperiod duration/ mag"; WRAP	No	No	No	Annually	5 yrs	WRAP, HGM, Ecodata	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	Yes	Yes	No	Yes	No	Min/Max	Fixed	No	Tables	Soil pits - depth to GW, photography	Yes	Yes	No	Years 1, 3	5 yrs		
No	No	No	No	No	No	No	No	No	Tables	Photography	No	No	No	Unspecified	5 yrs	MWAM	MWAM in years 1 and 5
No	No	No	No	No	No	No	No	No	Tables	Photography	No	No	No	Unspecified	5 yrs	MWAM	MWAM in years 1 and 5
No	No	No	No	No	No	No	No	No	Tables	Photography	No	No	No	Unspecified	5 yrs	MWAM	MWAM in years 1 and 5
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	



Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006			Prairie Pothole		No	Yes	No	No	Yes	1987
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006			Wet Meadow		No	Yes	No	No	Yes	1987
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006		Emergent			No	Yes	No	No	Yes	1987
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006		Forested			No	Yes	No	No	Yes	1987
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006		Scrub/Shrub			No	Yes	No	No	Yes	1987
Upper Missouri	MT	Omaha	Private Commercial	SRI Missouri Headwaters, LLC	Approved	3/7/2013		Emergent			No	Yes	No	Yes	Yes	1987
Upper Missouri	MT	Omaha	Private Commercial	SRI Missouri Headwaters, LLC	Approved	3/7/2013		Forested			No	Yes	No	Yes	Yes	1987
Upper Missouri	MT	Omaha	Private Commercial	SRI Missouri Headwaters, LLC	Approved	3/7/2013		Scrub/Shrub			No	Yes	No	Yes	Yes	1987
Upper Yellowstone	MT	Omaha	Private Commercial	Beartooth Mitigation LLC	Approved	7/27/2011		Emergent			No	Yes	Yes	No	Yes	1987
Upper Yellowstone	MT	Omaha	Private Commercial	Beartooth Mitigation LLC	Approved	7/27/2011		Scrub/Shrub			No	Yes	Yes	No	Yes	1987
Ducks Unlimited - Beaver Bay	ND	Omaha	ILF Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	10/27/2016			Prairie Pothole		Yes	Yes	No	No	Yes	Fringe should be expected to be seasonal, interior could be considered semi- permanent Fringe should be expected to be seasonal, interior could be considered semi- permanent
Ducks Unlimited - Wahlund	ND	Omaha	ILF Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	2/4/2016			Prairie Pothole		Yes	Yes	Yes	Yes	Yes	
NDDOT UMBRELLA - Foss	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013			Prairie Pothole		No	Yes	No	No	Yes	1987
NDDOT UMBRELLA - Herda	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013			Prairie Pothole		No	Yes	No	Yes	Yes	1987
NDDOT UMBRELLA - Kirkeby/ Schuster	ND	Omaha	Single-Client	NDDOT	Approved	8/3/2015			Prairie Pothole		No	Yes	No	No	Yes	1987
NDDOT UMBRELLA - Kueber NDDOT	ND	Omaha	Single-Client	NDDOT	Approved	8/3/2015			Prairie Pothole		No	Yes	No	No	Yes	1987
UMBRELLA - Manning	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013			Prairie Pothole		No	Yes	No	Yes	Yes	1987

No	No	No	No	No	No	No	No	No	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
No	No	No	No	No	No	No	No	No	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
No	No	No	No	No	No	No	No	No	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
No	No	No	No	No	No	No	No	No	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
No	No	No	No	No	No	No	No	No	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	MWAM	No	No	No	Annually	5 yrs+	MWAM	
No	No	No	No	No	No	No	No	No	List	Depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	No	Annually	5 yrs+		
No	No	No	No	No	No	No	No	No	List	Depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	No	Annually	5 yrs+		
No	Yes	No	No	No	Yes	No	No	No	Paragraphs	Delineation	No	No	No	Annually	5 yrs		
No	Yes	No	No	No	Yes	No	No	No	Paragraphs	Delineation	No	No	No	Annually	5 yrs		
No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		
No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		
No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		
No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		
No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		

NDDOT UMBRELLA - Trego	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013			Prairie Pothole		No	Yes	No	Yes	Yes	1987
North Central Mitigation - Jandl	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	1/3/2017			Prairie Pothole		Yes	Yes	Yes	No	Yes	1987
North Central Mitigation UMBRELLA - Hatch	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	4/28/2017	Riverine				Yes	No	No	No	Yes	Anticipated hydrologic regime - shallow ponding
SDDOT UMBRELLA - Anderson	SD	Omaha	Single-Client	SDDOT	Approved	6/4/2014			Prairie Pothole		Yes	No	Yes	No	Yes	1987
SDDOT UMBRELLA - Anderson	SD	Omaha	Single-Client	SDDOT	Approved	6/4/2014	Riverine				Yes	No	Yes	No	Yes	1987
SDDOT UMBRELLA - Weisbeck	SD	Omaha	Single-Client	SDDOT	Approved	6/10/2015			Prairie Pothole		Yes	No	Yes	No	Yes	1987
SDDOT UMBRELLA - Weisbeck	SD	Omaha	Single-Client	SDDOT	Approved	6/10/2015	Riverine				Yes	No	Yes	No	Yes	1987
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008		Emergent		Seasonally flooded	Yes	Yes	No	No	Yes	Range temporarily to seasonally flooded; annual spring flooding
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008		Aquatic Bed		Semi- permanently flooded	Yes	Yes	No	No	Yes	Range temporarily to seasonally flooded; annual spring flooding
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008		Emergent		Temporarily flooded	Yes	Yes	No	No	Yes	Range temporarily to seasonally flooded; annual spring flooding
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008		Forested		Temporarily flooded	Yes	Yes	No	No	Yes	Range temporarily to seasonally flooded; annual spring flooding
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008			Prairie Pothole		Yes	Yes	No	No	Yes	Range temporarily to seasonally flooded; annual spring flooding
Tetonka II	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	12/29/2009			Prairie Pothole		Yes	No	Yes	No	Yes	Range temporarily to seasonally flooded; annual spring flooding >50% of yrs
Baileys' Meadow	UT	Sacramento	Private Commercial	Diversified Habitats, LLC	Terminated	9/30/1999			Marsh		Yes	No	No	No	Yes	Water delivery system inspected
Baileys' Meadow	UT	Sacramento	Private Commercial	Diversified Habitats, LLC	Terminated	9/30/1999			Wet Meadow		Yes	No	Yes	No	Yes	Water delivery system inspected
Inland Sea Shorebird Reserve	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014	Tidal Fringe		Mudflats		No	Yes	No	No	No	0

No	No	No	No	No	No	No	No	No	List	Inspection of infrastructure	No	No	Yes	Annually for 5 yrs, then once every 5 yrs	In perpetuity, or until waived by Corps		
No	No	No	No	No	No	No	No	No	List	Photography	No	No	No	Annually	At least 5 yrs, or 10 yrs for forest	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	No	No	No	List	List of primary/secondary hydrology indicators	No	No	No	Annually	At least 5 yrs, or 10 yrs for forest	HGM (prairie pothole)	
No	No	No	No	No	No	No	No	No	List	List of primary/secondary hydrology indicators	No	No	No	Annually	5 yrs+	HGM (prairie pothole)	
No	No	No	No	No	No	No	No	No	List	List of primary/secondary hydrology indicators	No	No	No	Annually	5 yrs+	HGM (riverine)	
No	No	No	No	No	No	No	No	No	List	List of primary/secondary hydrology indicators	No	No	No	Annually	5 yrs+	HGM (prairie pothole)	
No	No	No	No	No	No	No	No	No	List	List of primary/secondary hydrology indicators	No	No	No	Annually	5 yrs+	HGM (riverine)	
No	Yes	No	No	No	Yes	Range	No	No	List	Depth, source, frequency, duration of inundation; depth to GW	Yes	Yes	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	Range	No	No	List	Depth, source, frequency, duration of inundation; depth to GW	Yes	Yes	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	Range	No	No	List	Depth, source, frequency, duration of inundation; depth to GW	Yes	Yes	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	Range	No	No	List	Depth, source, frequency, duration of inundation; depth to GW	Yes	Yes	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	Range	No	No	List	Depth, source, frequency, duration of inundation; depth to GW	Yes	Yes	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	Yes	No	No	No	Yes	Range	Prob	No	List	Detailed hydrology map (frequency, duration of inundation); HGM assessments	Yes	No	Yes	Annually, then biannually once credits are released, then every 5 yrs after bank closes	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
No	No	No	No	No	No	No	No	No	Paragraphs	Water delivery system functionality	No	No	Yes	3/growing season	5 yrs	HEP	
No	No	No	No	No	No	No	No	No	Paragraphs	Water delivery system functionality	No	No	Yes	3/growing season	5 yrs	HEP	
No	No	No	No	No	No	No	No	No	List	Staff gauges - pond surface elevation, pond diversions	Yes	No	Yes	Weekly during growing season, bi-weekly otherwise	5 yrs+	HEP	Max/mean pond depths predicted

Inland Sea Shorebird Reserve	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014		Emergent	Marsh		No	No	Yes	No	No	0
Inland Sea Shorebird Reserve	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014			Playa		No	No	Yes	No	No	0
Inland Sea Shorebird Reserve	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014	Saline Meadow				No	No	Yes	No	No	0
Machine Lake	UT	Sacramento	Private Commercial	R&P Wetlands & Waterfowl, LLC	Approved	8/31/2007			Marsh		No	Yes	Yes	No	Yes	Ponding for much of the spring and summer, refilled in fall; depth ranging from 1-4 ft
Machine Lake	UT	Sacramento	Private Commercial	R&P Wetlands & Waterfowl, LLC	Approved	8/31/2007			Wet Meadow		No	Yes	Yes	No	Yes	Shallow flooding and/or saturated soil conditions for much or spring and early summer, dry out in summer/fall
Machine Lake	UT	Sacramento	Private Commercial	R&P Wetlands & Waterfowl, LLC	Approved	8/31/2007			Playa		No	Yes	Yes	No	Yes	Shallow ponding 2-10 in; may occur in normal late fall/winter/early spring, or for MU 13, in late spring and early fall
UDOT Northern Utah County	UT	Sacramento	Single-Client	UDOT	Approved	6/29/2009		Forested			Yes	Yes	No	No	Yes	As-built, hydrology will support veg comparable to on-site reference
UDOT Northern Utah County	UT	Sacramento	Single-Client	UDOT	Approved	6/29/2009		Emergent			Yes	Yes	No	Yes	Yes	As-built, hydrology will support veg comparable to on-site reference
UDOT Northern Utah County	UT	Sacramento	Single-Client	UDOT	Approved	6/29/2009			Marsh		Yes	Yes	Yes	Yes	Yes	As-built, hydrology will support veg comparable to on-site reference
UDOT Northern Utah County	UT	Sacramento	Single-Client	UDOT	Approved	6/29/2009			Wet Meadow		Yes	Yes	Yes	Yes	Yes	As-built, hydrology will support veg comparable to on-site reference
Warner	UT	Sacramento	Private Commercial	James Warner	Terminated	4/25/2002			Marsh		Yes	Yes	Yes	No	Yes	Inundation >=6 in over 67% of site; continuous inundation during growing season
Warner	UT	Sacramento	Private Commercial	James Warner	Terminated	4/25/2002			Wet Meadow		Yes	Yes	Yes	No	Yes	Inundation >=6 in over 67% of site; continuous inundation during growing season
Dumbell Ranch	WY	Omaha	Private Commercial	Sweetwater River Conservancy LLC	Approved	2/27/2014		Emergent			No	Yes	Yes	No	Yes	1987
Dumbell Ranch	WY	Omaha	Private Commercial	Sweetwater River Conservancy LLC	Approved	2/27/2014	Riverine	Unconsolidated Bottom			No	Yes	Yes	No	Yes	1987

No	No	No	No	No	No	No	No	No	List	Staff gauges - pond surface elevation, pond diversions	Yes	No	Yes	Weekly during growing season, bi- weekly otherwise	5 yrs+	HEP	Max/mean pond depths predicted
No	No	No	No	No	No	No	No	No	List	Staff gauges - pond surface elevation, pond diversions	Yes	No	Yes	Weekly during growing season, bi- weekly otherwise	5 yrs+	HEP	Max/mean pond depths predicted
No	No	No	No	No	No	No	No	No	List	Staff gauges - pond surface elevation, pond diversions	Yes	No	Yes	Weekly during growing season, bi- weekly otherwise	5 yrs+	HEP	Max/mean pond depths predicted
No	Yes	Yes	No	No	Yes	Range	No	No	List, organized by wetland type	Surface water depth	Yes	No	Yes	Annually	Annually until bank closes		PS not considered met until 2 yrs after supplemental watering ends
No	Yes	No	Yes	No	Yes	No	No	No	List, organized by wetland type	Surface water depth	Yes	No	Yes	Annually	Annually until bank closes		PS not considered met until 2 yrs after supplemental watering ends
No	Yes	Yes	No	No	Yes	Range	No	Yes	List, organized by wetland type	Surface water depth	Yes	No	Yes	Annually	Annually until bank closes		PS not considered met until 2 yrs after supplemental watering ends
Yes	No	No	No	No	No	No	No	No	List	Piezometers installed where hydrology unknown	Yes	Yes	No	Annually	5 yrs+		
Yes	No	No	No	No	No	No	No	No	List	Piezometers installed where hydrology unknown	Yes	Yes	No	Annually	5 yrs+		
Yes	No	No	No	No	No	No	No	No	List	Piezometers installed where hydrology unknown	Yes	Yes	No	Annually	5 yrs+		
Yes	No	No	No	No	No	No	No	No	List	Piezometers installed where hydrology unknown	Yes	Yes	No	Annually	5 yrs+		
No	Yes	Yes	No	No	Yes	Min/Max, Prob	Fixed	No	Paragraphs	Water delivery system functionality	No	No	No	Monthly for first growing season, then annually	5 yrs		
No	Yes	Yes	No	No	Yes	Min/Max, Prob	Fixed	No	Paragraphs	Water delivery system functionality	No	No	No	Monthly for first growing season, then annually	5 yrs		
Yes	No	No	No	No	No	No	No	No	Paragraphs	Piezometers - depth to GW; MWAM scores at yrs 3, 5, final	Yes	Yes	No	Annually	10 yrs, or until PS met for 2 consec yrs	MWAM	% increase in MWAM used as standard
Yes	No	No	No	No	No	No	No	No	Paragraphs	Piezometers - depth to GW; MWAM scores at yrs 3, 5, final	Yes	Yes	No	Annually	10 yrs, or until PS met for 2 consec yrs	MWAM	% increase in MWAM used as standard

//This sheet consolidates the "Comprehensive Data Set" and joins site plans approved on the same date into one project in c

Project Name	State	USACE District	Bank Type	Sponsor	Status	Approval Date	HGM
Inland Sea Shorebird Reserve	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014	Tidal Fringe, Saline Meadow
Baileys' Meadow	UT	Sacramento	Private Commercial	Diversified Habitats, LLC	Terminated	9/30/1999	
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008	
North Central Mitigation - Jandl	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	1/3/2017	Riverine
North Central Mitigation UMBRELLA - Hatch	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	4/28/2017	
Tetonka II	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	12/29/2009	
SDDOT UMBRELLA - Anderson	SD	Omaha	Single-Client	SDDOT	Approved	6/4/2014	Riverine
SDDOT UMBRELLA - Weisbeck	SD	Omaha	Single-Client	SDDOT	Approved	6/10/2015	Riverine
Dumbell Ranch	WY	Omaha	Private Commercial	Sweetwater River Conservancy LLC	Approved	2/27/2014	Riverine
MARS Yellowstone ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	5/2/2017	
Middle Missouri River	MT	Omaha	Private Commercial	Middle Missouri Mitigation LLC	Approved	2/24/2012	Depressional, Slope, Riverine
Upper Missouri	MT	Omaha	Private Commercial	SRI Missouri Headwaters, LLC	Approved	3/7/2013	
Lower/Middle Yellowstone UMBRELLA - Ringling, Schwarzkoph-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	Riverine

Order to calculate the # of times each set of standards/monitoring has been approved. 1 = Yes, 0 = No.

<i>Cowardin</i>	<i>Modifier</i>	<i>Hydrologic Regime</i>	<i>Creation</i>	<i>Restoration</i>	<i>Enhancement</i>	<i>Preservation</i>	<i>HPS</i>
Emergent	Mudflats, Marsh, Playa		0	1	1	0	1
	Marsh, Wet Meadow		1	0	1	0	1
Emergent, Aquatic Bed, Forested	Prairie Pothole	Temporarily, seasonally, and semi- permanently flooded	1	1	0	0	1
	Prairie Pothole		1	1	1	0	1
			1	0	0	0	1
	Prairie Pothole		1	0	1	0	1
	Prairie Pothole		1	0	1	0	1
	Prairie Pothole		1	0	1	0	1
Emergent, Unconsolidated Bottom			0	1	1	0	1
Emergent, Forested, Scrub/Shrub			0	0	0	1	0
Emergent, Unconsolidated Bottom			0	0	1	0	1
Emergent			0	1	0	1	1
Emergent, Forested, Rock Bottom, Scrub/Shrub, Unconsolidated Shore			0	1	0	0	1



<i>Specific HPS</i>	<i>Reference Area</i>	<i>Outcome-Based</i>	<i>Quantitative</i>	<i>Saturation</i>	<i>Water Table</i>	<i>Inundation</i>	<i>Water Criteria</i>
0	0	0	0	0	0	0	0
Water delivery system inspected	0	0	0	0	0	0	0
Range temporarily to seasonally flooded; annual spring flooding	0	1	0	0	0	1	Range
1987	0	0	0	0	0	0	0
Anticipated hydrologic regime - shallow ponding	0	1	0	0	0	1	0
Range temporarily to seasonally flooded; annual spring flooding >50% of yrs	0	1	0	0	0	1	Range
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0

<i>Time Criteria</i>	<i>Weather</i>	<i>Format</i>	<i>Data</i>	<i>Quantitative</i>	<i>Subsurface Readings</i>	<i>By Season</i>	<i>Collection Frequency</i>
0	0	List	Staff gauges - pond surface elevation, pond diversions	1	0	1	Weekly during growing season, bi-weekly otherwise
0	0	Paragraphs	Water delivery system functionality	0	0	1	3/growing season
0	0	List	Depth, source, frequency, duration of inundation; depth to GW	1	1	1	Annually
0	0	List	Photography	0	0	0	Annually
0	0	List	List of primary/ secondary hydrology indicators	0	0	0	Annually
Prob	0	List	Detailed hydrology map (frequency, duration of inundation); HGM assessments	1	0	1	Annually, then biannually once credits are released, then every 5 yrs after bank closes
0	0	List	List of primary/ secondary hydrology indicators	0	0	0	Annually
0	0	List	List of primary/ secondary hydrology indicators	0	0	0	Annually
0	0	Paragraphs	Piezometers - depth to GW; MWAM scores at yrs 3, 5, final	1	1	0	Annually
0	0	Tables	Photography	0	0	0	Unspecified
0	0	List	MWAM	0	0	0	Annually
0	0	List	MWAM	0	0	0	Annually
0	0	List	MWAM	0	0	0	Annually

<i>Monitoring Period</i>	<i>Functional Assessment</i>	<i>Notes</i>
5 yrs+	HEP	Max/mean pond depths predicted
5 yrs	HEP	
At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
At least 5 yrs, or 10 yrs for forest	HGM (prairie pothole)	
At least 5 yrs, or 10 yrs for forest	HGM (prairie pothole)	
At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	HGM (prairie pothole)	
5 yrs+	HGM (prairie pothole, riverine)	
5 yrs+	HGM (prairie pothole, riverine)	
10 yrs, or until PS met for 2 consec yrs	MWAM	% increase in MWAM used as standard
5 yrs	MWAM	MWAM in years 1 and 5
5 yrs+	MWAM	
5 yrs+	MWAM	
5 yrs+	MWAM	

WetBank Gunnison	CO	Sacramento	Private Commercial	Stillwater Preservation LLC	Approved	8/2/1999	
Middle South Platte River	CO	Omaha	Private Commercial	Land and Water Resources, Inc.	Approved	5/20/1999	
Marshall	CO	Omaha	Public Commercial	City of Boulder	Sold-Out	4/19/2000	
Rocky Mountain Institute	CO	Sacramento	Private Commercial	Rocky Mountain Institute	Suspended	6/2/2005	
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006	
Upper Yellowstone	MT	Omaha	Private Commercial	Beartooth Mitigation LLC	Approved	7/27/2011	Slope
Spring Water Ranch	CO	Sacramento	Private Commercial	Spring Water Ranch, LLC	Suspended	3/31/2005	
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008	
UDOT Northern Utah County	UT	Sacramento	Single-Client	UDOT	Approved	6/29/2009	
MARS Emond Ranch ILF	MT	Omaha	ILF Private Commercial	Montana Aquatic Resource Services	Approved	3/31/2017	
Four Mile Creek	CO	Omaha	Single-Client	Denver Water	Approved	8/27/2007	Mineral Flats

Forested, Scrub/Shrub	Grass/Grasslike	0	1	0	0	1
Emergent	Seasonally flooded, semi- permanently flooded	1	0	0	0	1
Scrub/Shrub, Emergent, Aquatic Bed						1
Scrub/Shrub, Forested	Grass/Grasslike, Willow Carr	0	1	0	0	1
Emergent, Forested, Scrub/Shrub	Prairie Pothole, Wet Meadow	0	1	0	0	1
Emergent, Scrub/Shrub		0	1	1	0	1
Forested, Grass/Grasslike, Scrub/Shrub		1	1	0	0	1
Forested, Grass/Grasslike, Scrub/Shrub		1	1	0	0	1
Forested, Emergent	Marsh, Wet Meadow	1	1	1	1	1
	Prairie Pothole	0	1	0	0	1
	Fen	0	1	1	0	1

1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate	0	1	1	1	0	0	Range
Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate	0	1	1	1	0	0	Range
As-built, hydrology will support veg comparable to on-site reference	1	0	0	0	0	0	0
Hydrology within 12 in during growing season (6/23-8/28)	0	1	1	0	1	0	Min/Max
<b>Mineral flats:</b> Saturated within 12 in for >= 66% of growing season, and/or avg seasonal table depth within 14.5 in. <b>Fen:</b> Saturated within 12 in for >=47% of growing season (edge areas may be saturated for 12.5% of growing season), and/or avg seasonal table depth within 20 in	1	1	1	1	1	0	Min/Max

0	0	List	"Hydroperiod duration/ mag"; WRAP	0	0	0	Annually
0	0	List	Depth to GW - shallow wells	1	1	1	2/month, plus constant electronic readings, for 5 months/yr
0	0	List	Saturation soil horizon via shallow monitoring wells	1	1	0	Unspecified
0	0	List	Hydroperiod, extent/ duration of inundation, GW monitoring, precip	1	1	1	First three growing seasons, then year-to-year basis in perpetuity
0	0	List	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	1	1	1	During 2 month growing season
0	0	List	Depth to saturation (surface, 0-6 in, 6-12 in)	1	1	0	Annually
0	0	List	Soil saturation via monitoring wells (12-18 in)	1	1	1	/2 wks growing
0	0	List	Soil saturation via monitoring wells (12-18 in)	1	1	1	/2 wks growing
0	0	List	Piezometers installed where hydrology unknown	1	1	0	Annually
Fixed	0	Tables	Soil pits - depth to GW, photography	1	1	0	Years 1, 3
Prob	0	Paragraphs	Duration of soil saturation (12 in), depth to table	1	1	1	July- September

5 yrs	WRAP, HGM, Ecodata	
Until PS have been achieved		Written report of field tile locations submitted to COE; monitoring reports contain hydrographs
Until sold-out		
5 yrs annually, then every 3 yrs in perpetuity		Site plan specifies that if veg is wrong, water levels will be manipulated
At least 5 yrs, AND 3 yrs after remedial action		Hydrologic regime specified by wetland location in site plan proposed conditions
5 yrs+		
5 growing seasons		
5 yrs		
5 yrs+		
5 yrs		
5 yrs or at discretion of IRT		HPS Format: one p specifies HPS for wetland type, one p explains how HPS were derived from ref



Mesa County Wetland UMBRELLA	CO	Sacramento	Public Commercial	Mesa County Dept. of Public Works	Approved	6/1/2005
Mile High	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out	10/12/1999
Riverdale	CO	Omaha	Private Commercial	South Platte Wetlands LLC	Approved	2/1/2002
NDDOT UMBRELLA - Foss, Herda, Manning, Trego	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013
NDDOT UMBRELLA - Kirkeby/ Schuster, Kueber	ND	Omaha	Single-Client	NDDOT	Approved	8/3/2015
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved	8/2/2010
Ducks Unlimited - Wahlund	ND	Omaha	ILF Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	2/4/2016

Emergent	Wet Meadow	1	1	1	0	1
Emergent, Aquatic Bed, Scrub/Shrub	Marsh, Persistent, Rooted Vascular Aquatic, Wet Meadow, Willow Carr	1	0	1	0	1
Emergent	Wet Meadow	1	0	1	0	1
	Prairie Pothole	0	1	0	1	1
	Prairie Pothole	0	1	0	0	1
Open Water, Forested, Scrub/Shrub	Deep Marsh, Pond, Cottonwood, Wet Meadow, Willow- Alder, Marsh	1	0	0	0	1
	Permanently inundated, seasonally deeply saturated, seasonally saturated, semi- permanently inundated					
	Prairie Pothole	1	1	1	1	1

Site plan specifies that wetland hydrology should be exhibited 30 days after recontouring	0	0	0	0	0	0	0
Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor	0	0	0	0	0	0	0
<b>Wet meadow:</b> Saturation within 18 in. <b>Emergent:</b> Saturation within 3 in	0	1	1	1	0	0	Min/Max
1987	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0
<b>Deep Marsh:</b> Permanently inundated; 12-28 in target; should stay b/w 4-36 in at all times. <b>Open Water:</b> Permanently inundated; 48-72 in target for deepest portions. <b>Forested Cottonwood:</b> Seasonally deeply saturated; 12-48 in below surface for min 14 consec days during growing season for 5/10 yrs. <b>Wet Meadow:</b> Seasonally saturated; 1 min 14 consec days of ponding or water table max 12 in during growing season for min 5/10 yrs. <b>Scrub/Shrub:</b> Seasonally saturated; min 14 consec days of ponding or water table max 12 in during growing season for min 5/10 yrs. <b>Marsh:</b> Semi-permanently inundated; 0-14 in for min 50% of growing season in normal years							Range, Min/Max
Fringe should be expected to be seasonal, interior could be considered semi-permanent	0	1	0	0	0	0	0

Min/Max	0	List	Piezometers - depth to GW, depth to saturation, depth of inundation (gauges)	1	1	1	At least annually
0	0	List	Piezometers	1	1	1	"Frequency sufficient to demonstrate wetland hydrology"
0	0	Paragraphs	Piezometers	1	1	1	Annually
0	0	List	Inspection of infrastructure	0	0	1	Annually for 5 yrs, then once every 5 yrs
0	0	List	Inspection of infrastructure	0	0	1	Annually for 5 yrs, then once every 5 yrs
Min/Max, Prob	1	Tables	Staff gauge - depth of inundation	1	0	1	/2 wks growing, /2 months otherwise
0	0	Paragraphs	Delineation	0	0	0	Annually

5 yrs+		
4 growing seasons		Hydrologic regimes for each wetland type specified in phasing plan
4 growing seasons		Hydrologic regimes for more specific wetland type specified in phasing plan
In perpetuity, or until waived by Corps		
In perpetuity, or until waived by Corps		
Until final PS have been achieved for 2 consec yrs		
5 yrs		

Ducks Unlimited - Beaver Bay	ND	Omaha	ILF Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	10/27/2016
Warner	UT	Sacramento	Private Commercial	James Warner	Terminated	4/25/2002
Machine Lake	UT	Sacramento	Private Commercial	R&P Wetlands & Waterfowl, LLC	Approved	8/31/2007
Limon	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996
El Paso County - UMBRELLA	CO	Albuquerque	Single-Client	El Paso County Environmental Services Dept.	Approved	4/30/2013

	Prairie Pothole	1	1	0	0	1
	Marsh, Wet Meadow	1	1	1	0	1
	Marsh, Wet Meadow, Playa	0	1	1	0	1
Emergent, Broadleaf Deciduous, Aquatic Bed	Persistent, Non-Persistent, Willow, Rooted Vascular	1	0	0	0	1
Emergent	Persistent	0	1	1	1	1

Fringe should be expected to be seasonal, interior could be considered semi-permanent	0	1	0	0	0	0	0
Inundation >=6 in over 67% of site; continuous inundation during growing season	0	1	1	0	0	1	Min/Max, Prob
<b>Marsh:</b> Ponding for much of the spring and summer, refilled in fall; depth ranging from 1-4 ft. Wet Meadow: Shallow flooding and/or saturated soil conditions for much or spring and early summer, dry out in summer/fall. Playa: Shallow ponding 2-10 in; may occur in normal late fall/winter/early spring, or for MU 13, in late spring and early fall	0	1	1	1	0	1	Range
75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter	0	1	1	0	0	0	0
Hydrology must meet duration of saturation/inundation in COE quantitative definition by wetland type; 70% of dominant species must be FAC or wetter	0	1	1	0	0	1	0

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0	0	Paragraphs	Delineation	0	0	0	Annually
Fixed	0	Paragraphs	Water delivery system functionality	0	0	0	Monthly for first growing season, then annually
0	1	List, organized by wetland type	Surface water depth	1	0	1	Annually
0	0	List	Acreage, wetland classes, vegetative monitoring	0	0	1	Annually
0	0	List, paragraphs	List of primary/ secondary hydrology indicators, hydrophytic veg cover	0	0	1	Annually

5 yrs		
5 yrs		
Annually until bank closes		PS not considered met until 2 yrs after supplemental watering ends
5 yrs or at discretion of IRT	HEP, HGM	Functional assessments used in mitigation ratios
5 yrs AND 3 yrs of no supplemental watering after PS met		

//This sheet compiles administrative information on each project.

Name	State	USACE District	Bank Type	Bank Sponsor	Bank Status	Approval Date	Acreage	Credit Classification	Mitigation Type(s)	Notes
Limon Mitigation Bank	CO	Albuquerque	Single-Client	Colorado DOT	Approved	7/1/1996	14	Palustrine Emergent	Creation	
Middle South Platte River	CO	Omaha	Private Commercial	Land and Water Resources, Inc.	Approved	5/20/1999	62.64	Wetlands	Creation	
WetBank Gunnison	CO	Sacramento	Private Commercial	Stillwater Preservation LLC	Approved	8/2/1999	109	None	Restoration	
Baileys' Meadow	UT	Sacramento	Private Commercial	Diversified Habitats, LLC	Terminated 6/12/2017	9/30/1999	96	Emergent Marsh, Freshwater Marsh Complex (creation), Freshwater Wet Meadow	Restoration, Enhancement	
Mile High Bank	CO	Omaha	Private Commercial	Mile High Wetland Group LLC	Sold-Out 8/29/2012	10/12/1999	30.3	Marsh, Moist Meadow, Wet Meadow, Wetlands, Willow Shrubland	Creation, Enhancement	
Marshall	CO	Omaha	Public Commercial	City of Boulder, CO	Sold-Out	4/19/2000	13	Wetlands	Sold-Out	
Riverdale	CO	Omaha	Private Commercial	South Platte Wetlands LLC	Approved	2/1/2002	55	Wetlands	Creation, Enhancement	
Spring Water Ranch	CO	Sacramento	Private Commercial	Spring Water Ranch, LLC	Suspended 3/27/2013	3/31/2005	60	Wetlands	Creation, Restoration	
Mesa County Wetland UMBRELLA	CO	Sacramento	Public Commercial	Mesa County Dept. of Public Works	Approved	6/1/2005	8.1+	Wetlands	Creation, Enhancement, Restoration	
Rocky Mountain Institute	CO	Sacramento	Private Commercial	Rocky Mountain Institute	Suspended 3/19/2013	6/1/2005	60	Wetlands	Restoration	
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Private Commercial	Nevada Spring Creek Partners, LLC	Approved	9/21/2006	264.9	Wet Meadow	Restoration	
Four Mile Creek Mire Bank	CO	Omaha	Single-Client	Denver Water	Approved	8/27/2007	96.1	Fen	Restoration, Enhancement	
Machine Lake	UT	Sacramento	Private Commercial	R&P Wetlands & Waterfowl, LLC	Approved	8/31/2007	1077	Freshwater Marsh Complex, Freshwater Wet Meadow, Mudflat Playa/Shallow Water, Saline Wet Meadow	Restoration, Enhancement	
Tetonka I	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	6/20/2008	76.19	Palustrine Emergent Wetland	Restoration, Creation	
Finger Rock Preserve	CO	Sacramento	Private Commercial	Finger Rock Preserve LLC	Approved	7/14/2008	255	Wetlands	Creation, Restoration	
UDOT Northern Utah County	UT	Sacramento	Single-Client	Utah DOT	Approved	6/29/2009	112.21	Forested Wetland, Wetlands	Creation, Restoration, Enhancement, Preservation	
Tetonka II	SD	Omaha	Private Commercial	Tetonka, LLP	Approved	12/29/2009	103.3	Palustrine Emergent Wetland	Enhancement, Creation	
Animas River Wetlands	CO	Sacramento	Private Commercial	Animas River Wetlands, LLC	Approved Suspended 7/1/2003, Terminated 2/6/2017	8/2/2010	52	Shaded Riverine Aquatic Restored, Wetlands	Creation	
Warner Mitigation Bank	UT	Sacramento	Private Commercial	James Warner	7/1/2003, Terminated 2/6/2017	2/1/2011	64	Emergent Marsh, Freshwater Wet Meadow, Saline Wet Meadow, Wet Meadow	Restoration, Enhancement, Creation	Clarification of dates needed
Upper Yellowstone Mitigation Bank	MT	Omaha	Private Commercial	Beartooth Mitigation LLC	Approved	7/27/2011	42.7	Palustrine Emergent/Palustrine Scrub/Shrub	Enhancement, Restoration	
Middle Missouri River Bank	MT	Omaha	Private Commercial	Middle Missouri Mitigation LLC	Approved	2/24/2012	32.9	Palustrine Emergent Wetland, persistent & seasonally flooded	Enhancement	
Upper Missouri Mitigation Bank	MT	Omaha	Private Commercial	SRI Missouri Headwaters, LLC	Approved	3/7/2013	127	Palustrine Emergent, Scrub-Shrub, Forested Wetland	Restoration, Preservation	
El Paso County - UMBRELLA	CO	Albuquerque	Single-Client	El Paso County Environmental Services Dept.	Approved	4/30/2013	4.55	Palustrine Emergent persistent	Restoration, Enhancement, Preservation	
NDDOT UMBRELLA - Foss	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013	48.67	Pothole	Restoration	
NDDOT UMBRELLA - Herda	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013	13.59	Pothole	Restoration, Preservation	
NDDOT UMBRELLA - Manning	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013	153.69	Pothole	Restoration, Preservation	
NDDOT UMBRELLA - Trego Bank Site	ND	Omaha	Single-Client	NDDOT	Approved	6/24/2013	5.49	Pothole	Restoration, Preservation	
Dumbell Ranch Bank	WY	Omaha	Private Commercial	Sweetwater River Conservancy LLC	Approved	2/27/2014	740.59	Wetlands	Restoration, Enhancement	
SDDOT UMBRELLA - Anderson	SD	Omaha	Single-Client	SDDOT	Approved	6/4/2014	47	Depressional	Creation, Enhancement	
Lower/Middle Yellowstone UMBRELLA - Ringling Ranch	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	5.64	Wetlands	Restoration	
Lower/Middle Yellowstone UMBRELLA - Schwarzkopf-Waage	MT	Omaha	Private Commercial	Yellowstone Mitigation LLC	Approved	6/25/2014	68	Wetlands	Restoration	
Inland Sea Shorebird Reserve Bank	UT	Sacramento	Private Commercial	Rio Tinto Kennecott Utah Copper	Approved	11/25/2014	3879	Emergent Marsh, Mudflat Playa/Shallow Water, Saline Wet Meadow	Enhancement	
SDDOT - Weisbeck	SD	Omaha	Single-Client	SDDOT	Approved	6/10/2015	36.69	Depressional, Riverine	Creation, Enhancement	
NDDOT UMBRELLA - Kirkeby/ Schuster	ND	Omaha	Single-Client	NDDOT	Approved	8/3/2015	75.51	Pothole	Restoration	
NDDOT UMBRELLA - Kueber	ND	Omaha	Single-Client	NDDOT	Approved	8/3/2015	44.19	Pothole	Restoration	
Ducks Unlimited - Wahlund Bank Site	ND	Omaha	ILF - Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	2/4/2016	57.16	Pothole	Creation, Restoration, Enhancement, Preservation	
Ducks Unlimited - Beaver Bay Site	ND	Omaha	ILF - Private Nonprofit	Ducks Unlimited - Great Plains Region	Approved	10/27/2016	69.75	Pothole	Restoration, Creation, Enhancement	
North Central Mitigation - Jandl	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	1/3/2017	40.44	Depressional	Creation, Restoration, Enhancement	
MARS - Emond Ranch ILF	MT	Omaha	ILF - Private Commercial	Montana Aquatic Resource Services	Approved	3/31/2017	10.7	Prairie Pothole	Restoration	
North Central Mitigation UMBRELLA - Hatch	SD	Omaha	Private Commercial	North Central Mitigation LLC	Approved	4/28/2017	42	None	Creation	
MARS - Yellowstone RO-08	MT	Omaha	ILF - Private Commercial	Montana Aquatic Resource Services	Approved	5/2/2017	11.91	Emergent, Forested, Scrub/Shrub	Preservation	

//This sheet contains a description of each project's HPS.

Name	State	USACE District	Reference Area?	Any HPS?	HPS Beyond 1987?	Add'l HPS	Are Add'l HPS Objective?	Add'l HPS Performance-Based?	Add'l HPS Quantitative?	Saturation Specified?	Depth to Water Table Specified?	Inundation Specified?	Water Min, Max, Range, Fixed #, Prob?	Time Min, Max, Range, Fixed #, Prob?	HPS Incorporate Weather Conditions?	HPS Location	HPS Format	Multiple Wetland Types?	Wetland Type(s)	HPS Differentiated by Wetland Type?	Notes
Animas River Wetlands	CO	Sacramento	Yes	Yes	Yes	Permanent inundation of pond (48-72 in); permanent inundation of deep marsh (12-28 in target, 4-36 in max); marsh semi-permanently inundated (0-14 in >=50% of time in normal yrs); seasonally saturated wet meadow (>=14 consec. days ponding, or table <= 12 in, for 5 yrs/10 = 50% prob); willow shrub same as wet meadow; cottonwood "deeply saturated" (table 48-12 in below, >=14 consec. days during growing season, 5/10 yrs)	Yes	Yes	Yes	Yes	Yes	Yes	Range	Min, prob	Yes	Development plan	Tables; one table per wetland type; each PS gets its own row; columns are success criteria, PS, yr 1-4/final, monitoring method, remedial measures	Yes	Aquatic, Marsh, Wet Meadow, Willow, Cottonwood	Yes	
El Paso County UMBRELLA - Falcon Vista	CO	Albuquerque	No	Yes	Yes	Hydrology must meet duration of saturation/inundation in COE quantitative definition by wetland type; 70% of dominant species must be FAC or wetter	Yes	Yes	Yes	No	No	Yes	Range	Range	No	Instrument, site plan	List, paragraphs	Yes	Emergent persistent	Yes	HPS differentiated by hydrologic regime, but Cowardin classification used does not specify hydrology
Finger Rock Preserve	CO	Sacramento	No	Yes	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate	Yes	Yes	Yes	Yes	No	No	Range	No	No	Instrument	List	Yes	Slope, Grass/Grasslike, Scrub/Shrub, Forested	No	
Four Mile Creek Mire Bank	CO	Omaha	Yes	Yes	Yes	Fens - soil saturated within 12 in for >= 66% of growing season, and/or avg seasonal table depth within 14.5 in; mineral soil wetland - saturated within 12 in for >=47% of growing season (edge areas may be saturated for 12.5% of growing season), and/or avg seasonal table depth within 20 in of surface	Yes	Yes	Yes	Yes	Yes	No	Min	Min	No	Instrument	Paragraphs; one specifying HPS for the wetland type, followed by one explaining how HPS were derived from reference	Yes	Fen, Mire, Palustrine Emergent, Slope	Yes	
Limon Mitigation Bank	CO	Albuquerque	No	Yes	Yes	75% cover by herbaceous FACW or wetter; 50% cover by woody FACW or wetter	Yes	Yes	Yes	No	No	No	No	No	No	Instrument	List	Yes	Palustrine emergent persistent, Palustrine emergent non-persistent, Palustrine broadleaf deciduous (willow), Aquatic bed rooted vascular, Open Scrub/Shrub, Emergent, Aquatic Bed	No	
Marshall	CO	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Emergent, Aquatic Bed	No	
Mesa County Wetland UMBRELLA	CO	Sacramento	No	Yes	No	Site plan specifies that wetland hydrology should be exhibited 30 days after recontouring	Yes	Yes	No	No	No	No	No	Fixed #	No	Instrument	List	Yes	Wet Meadow, Emergent	No	
Middle South Platte River	CO	Omaha	No	Yes	Yes	All field tiles shall be disabled; written report of field tile locations submitted to COE	Yes	No	No	No	No	No	No	No	No	Instrument	List	Yes	PEMC, PEMF	No	

Mile High Bank	CO	Omaha	No	Yes	Yes	Water delivery/control systems operational; piezometric evidence of achievement of design water elevation (SW or GW) can be furnished by sponsor	No	Not required	No	No	No	No	No	No	No	No	Instrument	List	Yes	Palustrine: Emergent, Scrub/Shrub, Aquatic Bed; moist meadow; wet meadow; marsh; willow	No	Hydrologic regimes for each wetland type specified in phasing plan
Riverdale	CO	Omaha	No	Yes	Yes	Emergent - soil saturation within 3 in; wet meadow - saturation within 12 in (under "Assessing Eligibility for Credits"	Yes	Yes	Yes	Yes	No	No	Min	No	No	Instrument	List	Yes	Palustrine: Emergent, Scrub/Shrub, Aquatic Bed	Yes	Hydrologic regimes for each wetland type specified in phasing plan	
Rocky Mountain Institute	CO	Sacramento	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Ranging grasslike to forested	No	Site plan specifies that if veg is wrong, water levels will be manipulated
Spring Water Ranch	CO	Sacramento	No	Yes	Yes	Aerial photography; detailed hydrology map; saturation threshold will be at 12-18 in level; FAC-neutral veg test as surrogate	Yes	Yes	Yes	Yes	No	No	Range	No	No	Instrument	List	Yes	Riparian: Grass/Grasslike, Scrub/Shrub, Forested	No		
WetBank Gunnison	CO	Sacramento	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Grass/ Grasslike, Scrub/Shrub, Forested	No	Functional assessments determine lift	
Lower/Middle Yellowstone UMBRELLA - Ringling Ranch	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Palustrine Emergent	No		
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Scrub/Shrub, Forested	No		
MARS - Emond Ranch ILF	MT	Omaha	No	Yes	Yes	Hydrology within 12 in during growing season (6/23-8/28)	Yes	Yes	Yes	No	Yes	No	Min	Fixed #	No	Site plan	Tables	No	Prairie Pothole			
MARS - Yellowstone	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Site plan	Tables	Yes	Emergent, Forested, Scrub/Shrub	No		
Middle Missouri River Bank	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Riverine, Slope, Depressional	No		
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Palustrine Emergent, Wet Meadow, Prairie Pothole, Forested, Scrub/Shrub	No	Hydrologic regime specified by wetland location in site plan proposed conditions	
Upper Missouri Mitigation Bank	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No		List	Yes	Emergent, Forested, Scrub/Shrub	No	MWAM	
Upper Yellowstone Mitigation Bank	MT	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Scrub/Shrub, Emergent	No		
Ducks Unlimited - Beaver Bay Site	ND	Omaha	No	Yes	Yes	Fringe should be expected to be seasonal, interior could be considered semi-permanent	No	Yes	No	No	No	Yes	No	No	No	Instrument	Paragraphs	No	Prairie Pothole			
Ducks Unlimited - Wahlund Bank Site	ND	Omaha	No	Yes	Yes	Fringe should be expected to be seasonal, interior could be considered semi-permanent	No	Yes	No	No	No	Yes	No	No	No	Site plan	Paragraphs	No	Prairie pothole			
NDDOT - Foss	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			
NDDOT - Herda	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			
NDDOT - Kueber	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			
NDDOT - Trego	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			
NDDOT - Kirkeby/Schuster	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			
NDDOT - Manning	ND	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie Pothole			

North Central Mitigation UMBRELLA - Hatch	SD	Omaha	No	Yes	Yes	Anticipated hydrologic regime - shallow ponding	No	Yes	No	No	No	No	Yes	No	No	No	Site plan	List	No	Riverine depressional	No	Total functional lift used in credit release
North Central Mitigation UMBRELLA - Jandl	SD	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	No	Instrument	List	No	Prairie pothole	No	Total functional lift used in credit release
SDDOT UMBRELLA - Anderson	SD	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Depressional emergent, Riverine; Prairie Pothole	No	HGM used in credit release
SDDOT UMBRELLA - Weisbeck	SD	Omaha	No	Yes	No	N/A	No	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Depressional emergent, Riverine	No	HGM used in credit release
Tetonka I	SD	Omaha	No	Yes	Yes	Range temporarily to seasonally flooded; annual spring flooding	Some	Yes	Some	No	No	Yes	Range	No	No	No	Instrument	List	Yes	Prairie pothole, PEMA, PEMC, PABFx, PFOA	No	HGM used in credit release
Tetonka II	SD	Omaha	No	Yes	Yes	Range temporarily to seasonally flooded; annual spring flooding >50% of yrs	Some	Yes	Some	No	No	Yes	Range	Min	No	No	Instrument	List	Yes	Prairie pothole, palustrine emergent	No	HGM used in credit release
Baileys' Meadow	UT	Sacramento	No	Yes	Yes	Water delivery system inspected	Yes	No	No	No	No	No	No	No	No	No	Site Plan	Paragraphs	Yes	Emergent marsh, wet meadow	No	HEP used in credit release
Inland Sea Shorebird Reserve Bank	UT	Sacramento	No	No	No	N/A	No	No	No	No	No	No	No	No	No	No	Site Plan	List	Yes	Saline playa, mud flats, saline meadow, emergent marsh	No	HEP used in credit release
Machine Lake	UT	Sacramento		Yes	Yes	Wet meadow - shallow flooding and/or saturated soil for much of spring and early summer, dry out in summer/fall; emergent marsh - ponding for much of spring and summer, refilled in fall, depth ranging 1-4 ft; mudflat playa - shallow ponding 2-10 in, normal late fall/winter/early spring, or for one site in late spring/early fall	Yes	Yes	Yes	Yes	No	Yes	Range	No	Yes	Instrument	List, organized by wetland type	Yes	Saline wet meadow, freshwater wet meadow, emergent marsh, lacustrine marsh, mudflat/playa	Yes	PS not considered met until 2 yrs after supplemental watering ends	
UDOT Northern Utah County	UT	Sacramento	Yes	Yes	Yes	As-built, hydrology will support veg comparable to on-site reference	No	No	No	No	No	No	No	No	No	No	Instrument	List	Yes	Wet meadow, emergent marsh, forested	No	
Warner Mitigation Bank	UT	Sacramento	No	Yes	Yes	Inundation >=6 in over 67% of site; continuous inundation during growing season	Yes	Yes	Yes	No	No	Yes	Min	No	No	No	Instrument - monitoring plan	Paragraphs	Yes	Wet meadow, emergent marsh	No	
Dumbell Ranch Bank	WY	Omaha	Yes	Yes	No	N/A	No	No	No	No	No	No	No	No	No	No	Instrument	Paragraphs	No	Palustrine emergent	No	% increase in MWAM used as standard

//This sheet contains data on each project's monitoring plan as it appears in its instrument/site plan.

Name	State	USACE District	Hydrology Monitored Quantitatively?	Subsurface Measurements ?	Data Collected	Data Collection Instruments Specified?	Monitoring Plan Mentions Season?	Frequency of Data Collection	Monitoring Period	Notes
Animas River Wetlands	CO	Sacramento	Yes	No	Staff gauge - depth of inundation	Yes	Yes	/2 wks growing, /2 months otherwise	5 yrs or at discretion of IRT	
El Paso County UMBRELLA - Falcon Vista	CO	Albuquerque	No	No	List of primary/ secondary hydrology indicators, hydrophytic veg cover	No	Yes	July	5 yrs AND 3 yrs of no supplemental watering after PS met	
Finger Rock Preserve	CO	Sacramento	Yes	Yes	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	/2 wks growing	5 yrs	
Four Mile Creek Mire Bank	CO	Omaha	Yes	Yes	Duration of soil saturation (12 in), depth to table	No	Yes	July-September	5 yrs or at discretion of IRT	
Limon Mitigation Bank	CO	Albuquerque	No	No	Acreage, wetland classes, vegetative monitoring	No	Yes	Annually	5 yrs or at discretion of IRT	
Marshall	CO	Omaha	Yes	Yes	Depth to saturation via shallow monitoring wells	Yes	No	Unspecified	Until sold-out	
Mesa County Wetland UMBRELLA	CO	Sacramento	Yes	Yes	Piezometers - depth to GW, depth to saturation, depth of inundation (gauges)	Yes	No	At least annually	5 yrs+	
Middle South Platte River	CO	Omaha	Yes	Yes	Soil saturation - shallow wells	Yes	Yes	Collected during growing season (annually? Unclear)	Until PS have been achieved	
Mile High Bank	CO	Omaha	Yes	Yes	Piezometers	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	Unclear	
Riverdale	CO	Omaha	Yes	Yes	Piezometers	Yes	Yes	"Frequency sufficient to demonstrate wetland hydrology"	4 growing seasons	
Rocky Mountain Institute	CO	Sacramento	Yes	Yes	Hydroperiod, extent/duration of inundation, GW monitoring, precip	No	Yes	First three growing seasons, then annually in perpetuity	5 yrs annually, then every 3 yrs in perpetuity	

Spring Water Ranch	CO	Sacramento	Yes	Yes	Soil saturation via monitoring wells (12-18 in)	Yes	Yes	/2 wks growing	5 growing seasons	
WetBank Gunnison	CO	Sacramento	No	No	"Hydroperiod duration/mag"; HGM, WRAP, EcoData	No	No	Annually	5 growing seasons	
Lower/Middle Yellowstone UMBRELLA - Ringling Ranch	MT	Omaha	No	No	MWAM	No	No	Annually	5 yrs+	
Lower/Middle Yellowstone UMBRELLA - Schwarzkoph-Waage	MT	Omaha	No	No	MWAM	No	No	Annually	5 yrs+	
MARS - Emond Ranch ILF	MT	Omaha	Yes	Yes	Soil pits - depth to GW, photography	No	No	Years 1, 3	5 yrs	
MARS - Yellowstone RO-08	MT	Omaha	No	No	Photography	No	No	Unspecified	5 yrs	MWAM in years 1 and 5
Middle Missouri River Bank	MT	Omaha	No	No	MWAM	No	No	Annually	5 yrs+	
Upper Clark Fork - Wetland UMBRELLA	MT	Omaha	Yes	Yes	Piezometers, gauges, precip, depth to saturation (surface, 0-6 in, 6-12 in)	Yes	Yes	During 2 month growing season	At least 5 yrs, AND 3 yrs after remedial action	Supplemental grid-point sampling/2 yrs (Cowardin surface hydro classification)
Upper Missouri Mitigation Bank	MT	Omaha	No	No	MWAM	No	No	Annually	5 yrs+	
Upper Yellowstone Mitigation Bank	MT	Omaha	Yes	Yes	Depth to saturation (surface, 0-6 in, 6-12 in)	No	No	Annually	5 yrs+	Supplemental grid-point sampling/2 yrs (Cowardin surface hydro classification)
Ducks Unlimited - Beaver Bay Site	ND	Omaha	No	No	Delineation	No	No	Annually	5 yrs	
Ducks Unlimited - Wahlund Bank Site	ND	Omaha	No	No	Delineation	No	No	Annually	5 yrs	
NDDOT - Foss	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	
NDDOT - Herda	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	



NDDOT - Kueber	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	
NDDOT - Manning	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	
NDDOT - Trego	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	
NDDOT - Kirkeby/Schuster	ND	Omaha	No	No	Infrastructure inspected	No	Yes	Annually for 5 yrs, then every 5 yrs in perpetuity	In perpetuity, or until waived by Corps	
North Central Mitigation - Jandl	SD	Omaha	No	No	Photography	No	No	Annually	At least 5 yrs, or 10 yrs for forest	Supplemental grid-point sampling/2 yrs
North Central Mitigation UMBRELLA - Hatch	SD	Omaha	No	No	List of primary/secondary hydrology indicators	No	No	Annually	At least 5 yrs, or 10 yrs for forest	Supplemental grid-point sampling/2 yrs
SDDOT - Weisbeck	SD	Omaha	No	No	List of primary/secondary hydrology indicators	No	No	Annually	5 yrs+	
SDDOT UMBRELLA - Anderson	SD	Omaha	No	No	List of primary/secondary hydrology indicators	No	No	Annually	5 yrs+	
Tetonka I	SD	Omaha	Yes	Yes	Depth, source, frequency, duration of inundation; depth to GW	No	Yes	Annually	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	
Tetonka II	SD	Omaha	Yes	No	Detailed hydrology map (frequency, duration of inundation); HGM assessments	No	Yes	Annually, then biannually once credits are released, then every 5 yrs after bank closes	At least 5 yrs, AND 3 yrs after remedial action, then in perpetuity	
Baileys' Meadow	UT	Sacramento	No	No	Water delivery system functionality	No	Yes	3/growing season	5 yrs	
Inland Sea Shorebird Reserve Bank	UT	Sacramento	Yes	No	Staff gauges - pond surface elevation, pond diversions	Yes	Yes	Weekly during growing season, bi-weekly otherwise	5 yrs+	
Machine Lake	UT	Sacramento	Yes	No	Surface water depth	No	Yes	Annually	Annually until bank closes	
UDOT Northern Utah County	UT	Sacramento	Yes	Yes	Piezometers installed where hydrology unknown	Yes	No	Annually	5 yrs+	

Warner Mitigation Bank	UT	Sacramento	No	No	Water delivery system functionality	No	No	Monthly for first growing season, then annually	5 yrs
Dumbell Ranch Bank	WY	Omaha	Yes	Yes	Piezometers - depth to GW	Yes	No	Annually	10 yrs or at discretion of IRT